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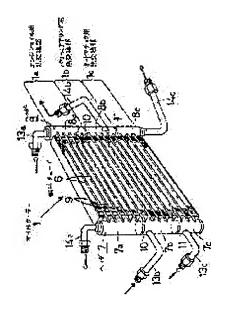
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## (54) OIL COOLER

## (57) Abstract:

PURPOSE: To contrive an easy way to design, manufacture and install an oil cooler by a method wherein the inside of a header is divided into a plurality of heat exchanging parts separate from one another and a plurality of oil having different functions is passed separately through each heat exchanging part independently of one another.

CONSTITUTION: An oil cooler 1 is provided with an upper heat exchanging part 1a for passing engine oil therethrough, an intermediate heat exchanging part 1b for passing power steering oil therethrough and a lower heat exchanging part 1c for passing automatic transmission oil therethrough, whereby such oil flows are produced independently of one another without running



together. The oil is passed through each of the heat exchanging parts 1a, 1b and 1c while the turbulent oil currents are being caused by the upper and lower raised parts in tubes 6. Since the upper and lower raised parts are arranged in a zigzag, moreover, the repeated oil flows are produced in a zigzag direction heightwise of the tube 6 and, due to the resulting increase in the area and length of the oil passage, a higher heat exchanging performance is realized.